What is claimed is:

1. A test method for a message path existing between a first device and a second device, the first device and the second device being connected via a communications network and the communication between the first and the second device being effected by messages of a first protocol layer, the unmodified transmission of said messages in the communications network being effected by a second protocol layer subordinate to the first protocol layer, wherein the messages of the first protocol layer are sent by the first device to the second device at short time intervals and the address of the first device according to the first protocol layer being selected both as a send address and as a receive address for said test messages.

2. The method of claim 1, wherein the message path is marked as at least temporarily faulty if, within an appropriate period of time, a first test message that, in the fault-free case, is immediately sent back to the first device by the second device on account of the chosen receive address, which is the same as the send address, is not received by the first device.

3. The method of claim 2, wherein the message path is marked as permanently faulty if, within an appropriate period of time, a predeterminable number of further test messages are not received by the first device.

4. The method of claim 3, wherein a message path marked as permanently faulty continues to be tested using the test messages and the marking of this message path as faulty is canceled if the end of the fault is established by the first device owing to the receipt of test messages.

5. The method of claim 1, wherein the test messages of the first protocol layer are sent by the second device to the first device at short time intervals, the address of the first protocol layer of the second device being selected both as send address and as receive address for such test messages.

6. The method of claim 1, wherein in the case of a redundant connection having multiple message paths between the first device and the second device, which is formed by the said communications network and at least one further communications network, separate interfaces of the first device Host being linked to the respective redundant communications networks and crosslinks being provided between the redundant communications networks, all message paths are tested and separately marked as faulty if faults are present.

7. The method of claim 6, wherein that at least one interface is marked as active and used for the transmission of user data and at least one further interface is marked as a standby and is not used for the transmission of user data, and the standby interface is activated and user data is henceforth transmitted via the standby interface and a message path associated with the standby interface as soon as all message paths associated with the active interface are marked as temporarily or permanently faulty.

8. The method of claim 6, wherein the second device is also configured redundantly in that at least one third device is provided, which takes over the function of the second device in the event of the latter's failure, the communication of the first device basically being routed to the second device as long as the second device can be reached via a message path associated with one of the interfaces and not being routed to the third device until and unless all message paths between the first and the second device are faulty.

9. The method of claim 8, wherein, if all message paths between the first and the second device are faulty and the communication is routed to the third device, said communication is immediately routed to the second device as soon as one of the faulty message paths between the first and the second device is available once more.

10. The method of claim 1, wherein the communications networks are based on protocol layer 2 of a protocol hierarchy and the first, second and third device exchange or switch messages, datagrams or packets of protocol layer 3 of the protocol hierarchy.

11. The method of claim 1, wherein the communications networks are local area networks LAN and transfer or switch user data in accordance with the Ethernet protocol and the first, second and third device exchange or switch user data in accordance with the Internet protocol IP.

12. A Network element that is connected by a connection network to at least one further network element, multiple message paths existing between the network element and the further network element owing to the structure of the connection network and the data exchanged between the network elements being switched through the connection network unmodified, wherein the network element:

generates test messages related to the message paths, said messages being sent back immediately on account of their properties by the further network element to the network element,

sends the test messages to the further network element via the message paths, and

receives the test messages on all message paths.

13. The network element of claim 12, wherein the network element determines a faulty message path responding to a configurable number of test messages lost on this message path, the network element for determining the loss of test messages per message path having timers, the expiry of which signals the loss of a test message, the timer being initialized by a value corresponding to the maximum permissible signal transit time in the connection network (LAN) and being started by the transmission of the test message, and the timer being stopped by the correct reception of the test message.

14. The network element of claim 12, wherein the network elements reroutes the user data traffic to a message path of next-lower priority in the event of a fault on the higher-priority message path used up to that point.

15. The network element of claim 14, wherein the network element determines the end of the fault on a message path responding to the renewed reception of test messages, and reroutes the user data traffic to the message path of next-higher priority responding to the end of the fault.

16. A network arrangement for a communications network which connects a first device and a second device, comprising a first subnetwork and at least a second subnetwork, wherein the first subnetwork comprises first switching elements and the second subnetwork comprises second switching elements, and wherein the first and the second subnetwork are set up independently of each other, having at least one crosslink between the subnetworks and having at least a first link between the first subnetwork and a first interface of the first device and at least a second link between the second subnetwork and a second interface of the first device and having at least a third link between the first subnetwork and the second device, wherein links between the first switching elements and/or links between the second switching elements and/or the crosslink(s) are configured as long-distance connections.

17. The network arrangement of claim 16, wherein at least one of the crosslinks is disposed directly at the transition of the communications network to the second device.

18. The network arrangement of claim 16, further comprising a fourth link between the first subnetwork and a third device of the same type as the second device.

19. The network arrangement of claims 18, wherein the communication between the first and the second and/or third device is effected by means of messages of a first protocol layer, which are transmitted in the communications network by means of a second protocol layer that is subordinate to the first protocol layer.

20. The network arrangement of claim 18, wherein the first protocol layer is formed by the Internet Protocol IP and the second protocol layer is formed by a protocol of a local area network LAN.

21. The network arrangement of claim 20, wherein the long-distance connections are implemented as Ethernet-over-SONET connections.

22. The network arrangement of claim 20, wherein the long-distance connection(s) are implemented as a resilient packet ring RPR.

23. A network arrangement for a communication network which connects a first device and a second device comprising:

a first subnetwork and a second subnetwork, the first subnetwork comprising first switching elements and the second subnetwork comprising second switching elements, and

wherein the first and the second subnetwork are set up independently of each other,

having at least one crosslink between the subnetworks and

having at least a first link between the first subnetwork and a first interface of the first device and at least on second link between the second subnetwork and a second internace of the first device and

having at least a third link between the first subnetwork and the second device.

24. The network arrangement of claim 23, wherein the crosslink(s) are disposed directly at the transition of the communications network to the second device.

25. The network arrangement of claim 23, further comprising a fourth link between the first subnetwork and a third device of the same type as the second device.

26. The network arrangement of claim 23, wherein the communication between the first and the second and/or third device is effective by means of messages of a first protocol layer, which are transmitted in the communications network by means of a second protocol layer that is subordinate to the first protocol layer.

27. The network arrangement of claim 23, wherein that the first protocol layer is formed by the Internet Protocol IP and the second protocol layer is formed by a protocol of a local area network LAN.